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Dr. George Diehr Chair, Investment Committee California Public Employees' Retirement System 400 Q Street Sacramento, CA 95814

Re: Asset Liability Workshop Update

Dear Dr. Diehr:

You requested Wilshire's opinion with respect to Staff's update on the 2010 Asset Liability Workshop process. We will comment about each of the three components of the update in turn.

First, Wilshire agrees that the recent rally in bonds and resulting lower yield is sufficiently significant to warrant a revision in the expected returns to fixed income. Most forecasters use the current yield to maturity as a beginning point, adjusting for anticipated changes in interest rates over the span of the forecast. Given the meaningfully lower yields on bonds today, this downward revision is appropriate and prudent.

There are two important factors that are related to this change. First, the inflation assumption is not being lowered, despite lower breakeven inflation rates in the TIPS market. This, then, is a de facto decrease in the expected real return to fixed income. Practically speaking, the assumed returns on fixed income were already low enough that any allocation to fixed income would serve only as a reduction in expected risk, not as a driver of expected future returns. Moreover, depending on the target rate of return, it is quite likely that the participants in the Asset Liability Workshop will need to force a minimum lower bound on the allocation to fixed income in the interests of stability and liquidity. Otherwise, the optimization may choose to simply ignore this asset class.

The second factor associated with the change in the fixed income return assumption is that there is no corresponding reduction in the expected return for any other asset class. Given that equity markets are largely unchanged from the beginning of the year (when the forecasting process was originally undertaken), leaving the equity return assumption

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unchanged is reasonable. The same argument could be made for the other non-fixed income asset classes. However, this also presents an issue. The risk premium of equity, real estate, AIM, etc., is now larger relative to fixed income than with the prior assumptions. This view would be consistent with a "bond bubble" where bond prices were artificially inflated – not a view that we are espousing or contradicting. This simply raises an issue about returns relative to other asset classes. Again, from a practical standpoint, a minimum lower bound on fixed income will need to be established; otherwise this factor would tilt the optimizer toward non-fixed income asset classes.

Second, Wilshire does not agree with the streamlined alternative classification **system.** The original intent of the alternative classification system (growth, income, liquidity, etc.) was to define the expected role of various parts of CalPERS portfolio more clearly. This original alternative categorization system was developed over several months of discussion and was presented to, and tacitly accepted by, the Investment Committee. The revised system was developed with no input from Wilshire or PCA and is being introduced to the Investment Committee two months prior to the Asset Liability Workshop. By reducing the number of categories, we feel that much of the benefit of the alternative classification system is now forfeit. For example, many participants in the Asset Liability process have noted that core real estate and non-core real estate are subject to different risks and expected to play different roles in the CalPERS portfolio. Core real estate is expected to consist of high quality, income producing assets and is, in many ways, similar to Fixed Income. Non-core real estate is more sensitive to overall growth in the economy (lease up risks, development risks, etc.) and is analogous to Equities. Reclassifying these two into one category brings us back to the old system and ignores the differences between these two approaches to real estate. Admittedly, there is an effort underway to reduce the exposure internally to non-core real estate in favor of core real estate, resulting in more homogenous exposure within Real Estate and a more core-like portfolio. However, we must note that this reduction of non-core assets will take several years to accomplish and may not even be in CalPERS' best interests in the long run. Given the need to find higher returning asset classes to achieve "actuarial progress", the decision by Staff to reduce non-core assets from the portfolio ameliorates the impact of a source of potentially high returns in a future favorable environment. As a result, at least for the next few years, and arguably for the indefinite horizon, non-core real estate will have a presence in the portfolio and fill a desireable role for investors looking for sources of higher return. At a minimum, the Investment Committee should have the opportunity to weigh in on the mix of core and non-core real estate assets.

We also note that the proposed classification system treats RMARS as it has been treated in the past – as a sub-strategy of an asset class. However, the recently revised benchmark for Global Equity makes it clear that RMARS is expected to be very different from the rest of Global Equity. While we do not believe that hedge funds, in general, are an asset class, the size of the program warrants attention to the underlying characteristics. In addition, the alternative classification system was designed around expected drivers of risk and return – not the technical definition of "asset class." RMARS is sufficiently

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different from anything else in CalPERS portfolio that we believe that the size of any future allocation should be considered by the Investment Committee as part of the asset allocation process.

We recommend that the Investment Committee ask Staff to use the original alternative classification system in preparation for the Asset Liability Workshop.

Third, Wilshire views the proposed process and methodology as appropriate. We do note that the asset allocation process is ultimately a subjective process that should be ruled by the judgment of the Investment Committee. If the optimizer produces a result that is illogical or unreasonable, the Investment Committee should be prepared to critically evaluate the result and ask for changes that meet the Committee's needs and desires. Models are often elegant solutions, but cannot exercise the judgment of experienced investment fiduciaries or include the impacts of a myriad of risks (liquidity, headline, etc.) that are difficult to quantify.

## Conclusion

As we noted in our May 31 letter to the Investment Committee, it is clear that forecasting returns is far from a precise science. Having noted that, Wilshire believes that the proposed revised expected return, risk and correlations are appropriate for use in the 2010 Asset Liability Workshop. Having worked with Staff and other investment professionals in developing these estimates, we believe that the properly account for the current economic and market environments and will help the Investment Committee focus on the potential long term outcomes of various asset allocation scenarios at the Workshop. We do believe that the previously proposed alternative classification system more effectively captures the unique attributes of the investment program and should be favored over this current proposal.

Please let us know if you have any questions or comments.

Best regards,

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